

(from Khartoum)" (Nov. Zool. 1902, p. 428). *Strix flammea* from Kalao, a small island south of Celebes, will probably be referable to *S. flammea javanica* (Hartert, ib. 1896, p. 177). On the other hand, the same savant says of a specimen from Sumba, "this bird does not seem separable from *S. flammea typica*" (ib. 1896, p. 588), but soon afterwards it was given subspecific rank (*S. flammea sumbaensis* Hart. ib. 1897, p. 270). This is a good instance of the difficulty of determining the various subspecies or forms of Barn-Owls.

P.S.—Since I wrote this paper I have received the following additional note from Mr. Max Bartels:—

"The capture of this fine Owl I owe, singularly enough, wholly to some Drongos (*Dicrurus longus*). Observing some of these birds chasing an Owl, which I took at first for a Fishing-Owl (*Ketupa*), not uncommon hereabouts, the perseverance of their attacks induced me to follow them. Led by the loudly crying Drongos I easily found the Owl, hidden in the thick foliage of a tree, and shot it. At a glance I saw that it was of a species not yet obtained by me, undoubtedly new to Java, and perhaps also to science.

"The stomach contained only a few remains of large beetles."

XXVI.—*On the Birds collected in Transcaucasia by*

Mr. A. M. Kobylin. By S. A. BUTURLIN.

DURING the past three years Mr. A. M. Kobylin has been accustomed to send to me for identification the bird-skins obtained by him in Transcaucasia, and he has now kindly given his consent to the publication of my notes concerning them. The collection was made partly in the western portion of Transcaucasia—near Kutais and in the Lower Rion Valley, and partly in the central portion of Transcaucasia—near Akhalzikh (Tiflitz Government) and near Ssuram (Tiflitz Gov., Gori Distr.). A list of birds from the last-named

locality (Ssuram), containing some 54 specimens, has already been published by Mr. Kobylin in the Russian sporting periodical 'Psovaya e Rujeinaya Okhota' ('Hunting and Shooting') for 1905, pp. 137-144 and pp. 152-159, under the title of "Materials for an Avifauna of the Caucasus," together with his field-notes.

I now give a systematic list of the birds of Transcaucasia collected by Mr. Kobylin during the years 1903-1905. Others might doubtless have been added, but being a busy man he had not much time to spare. For shortness' sake only one list is given, but with three columns—

I. for Kutais (Rion Valley, Black Sea basin);

II. for Akhazikh (Kura Valley, Caspian Sea basin);

III. for Ssuram (one of the side valleys of the Upper Kura).

n. signifies that the species observed was nesting;

h. " wintering;

tr. " on migration;

ae. " in summer;

v. " in spring;

au. " in autumn;

s. " sedentary;

m. " abundant;

r. " rare;

+ " present (without further particulars);

() " seen, but not skinned or even killed;

0 " that the species was never observed;

* An asterisk prefixed denotes that the species is more fully dealt with further on in the paper.

	I.	II.	III.
1. <i>Podiceps fluviatilis Tunst.</i>	r. au.	0	0
2. <i>Phalacrocorax carbo L.</i>	+	0	0
3. <i>Rallus aquaticus L.</i>	h.	0	0
4. <i>Crex ciex L.</i>	(ae.)	0	0
5. <i>Gallinula chloropus L.</i>	n.	0	0
6. <i>Scolopax rusticola L.</i>	m. h.	0	0
7. <i>Gallinago gallinago L.</i>	m. h.	0	au.
8. <i>Limicola platyrhyncha Temm.</i>	m. au.	0	0
9. <i>Tringa minuta Leisl.</i>	au.	0	au.
10. <i>T. alpina L.</i>	m. au.	0	0
11. <i>T. subarquata Guld.</i>	au.	0	0
12. <i>Pavoncella pugnax L.</i>	r. au.	0	0
13. <i>Terekia cinerea Guld.</i>	m. au.	0	0

	I.	II.	III.
14. <i>Actitis hypoleucos</i> L.	ae.	0	ae.
15. <i>Totanus calidris</i> L.	au.	0	0
16. <i>T. glareola</i> L.	0	0	ae.
17. <i>T. ochropus</i> L.	(v. au.)	0	m. au.
18. <i>Numenius arquata</i> L.	(au.)	0	0
19. <i>N. phaeopus</i> L.	m. au.	0	0
20. <i>Phalaropus lobatus</i> L.	r. au.	0	0
21. <i>Haematopus ostralegus</i> L.	r. ae.	0	0
22. <i>Streptilas interpres</i> L.	m. au.	0	0
23. <i>Aegialitis dubia</i> Scop.	n. m. tr.	0	ae. au.
24. <i>A. hiaticula</i> L.	m. au.	0	0
25. <i>Vanellus vanellus</i> L.	(m. v.)	0	0
26. <i>Hydrochelidon nigra</i> L.	au.	0	0
27. <i>Sterna fluviatilis</i> Naum.	(au.)	0	0
28. <i>Turtur turtur</i> L.	m. n.	0	m. n.
29. <i>Columba oenas</i> L.	(au.)	0	(m. au.)
30. <i>C. palumbus</i> L.	h.	0	0
31. <i>Coturnix coturnix</i> L.	n. m. tr.	0	m. n.
*32. <i>Perdix perdix canescens</i> , n. subsp.	0	+	0
33. <i>Phasianus colchicus</i> L.	m. s.	0	0
34. <i>Fuligula ferina</i> L.	h.	0	0
35. <i>Nettion crecca</i> L.	au.	0	0
36. <i>Anas boschas</i> L.	m. h.	0	0
37. <i>Mergus albellus</i> L.	h.	0	0
38. <i>Ardea cinerea</i> L.	(m. n.)	0	0
39. <i>Ciconia alba</i> L.	(ae.)	0	0
40. <i>Pandion haliaetus</i> L.	(au.)	0	0
41. <i>Neophron percnopterus</i> L.	0	0	(ae.)
42. <i>Astur palumbarius</i> L.	(u.)	0	(ae.)
43. <i>Accipiter nisus</i> L.	s.	0	m. n.
44. <i>Buteo vulpinus menetriesi</i> Bogd.	n. m. au.	0	0
45. <i>Circaëtus gallicus</i> Gm.	(m. au.)	0	0
46. <i>Haliaëtus albicilla</i> L.	(m. s.)	0	0
47. <i>Falco subbuteo</i> L.	r. au.	0	(r. au.)
48. <i>Circus aeruginosus</i> L.	m. au.	0	(m. au.)
49. <i>Scops scops</i> L.	m. n.	0	0
50. <i>Syrnium aluco</i> L.	n.	0	0
51. <i>Caprimulgus europæus</i> L. (unwini Hume).	n.	0	n.
52. <i>Cuculus canorus</i> L.	m. n.	0	(m. n.)
53. <i>Coracias garrulus</i> L.	m. n.	0	(m. au.)
54. <i>Merops apiaster</i> L.	v. au.	0	m. au.
55. <i>Alcedo ispida</i> L.	(n.)	0	(r. ae.)
56. <i>Upupa epops</i> L.	v. au.	0	au.
*57. <i>Cypselus apus</i> L. (? var.)	m. n.	0	(m. n.)
58. <i>C. melba</i> L.	(n.)	0	0
59. <i>Iynx torquilla</i> L.	(m. n.)	0	0
*60. <i>Gecinus viridis saundersi</i> Tacz.	+	0	0
*61. <i>Dendrocopos major tenuirostris</i> , n. subsp.	m. n.	h.	(+)
*62. <i>D. leuconotus lilfordi</i> Dress. (? var.)	+	0	0
63. <i>D. danfordi</i> Hargitt	(+)	0	0
*64. <i>Dendrocoptes medius caucasicus</i> Bianchi.	+	0	0
65. <i>Otocorys alpestris flava</i> Gm.	au.	0	0

	I.	II.	III.
66. <i>Otocorys penicillata Gould</i>	h.	h.	0
67. <i>Melanocorypha calandria L.</i>	r. h.	h.	0
68. <i>Lullula arborea L.</i>	0	v.	0
69. <i>Alauda arvensis L.</i>	m. h.	h.	m. n.
70. <i>Galerida cristata caucasica Tacz.</i>	0	h.	au.
71. <i>Calandrella brachydactyla Leisl.</i>	m. au.	0	0
72. <i>Merula merula L.</i>	m. s.	h.	m. n.
73. <i>Turdus pilaris L.</i>	m. h.	0	0
74. <i>T. musicus L.</i>	h.	0	0
*75. <i>Cinclus rufiventris Hempr. et Ehr.</i>	0	h.	ae.
76. <i>Saxicola morio Ehr.</i>	r. au.	0	0
77. <i>S. isabellina Rüpp.</i>	m. au.	0	0
*78. <i>Pratincola maura Pall.</i>	0	0	m. n.
79. <i>P. hemprichi Ehr.</i>	m. au.	0	0
80. <i>Ruticilla mesoleuca Hempr. et Ehr.</i>	0	0	ae.
81. <i>Accentor modularis orientalis Sharpe</i>	h.	0	0
82. <i>Erithacus rubecula L. (non byrcanus Bl.)</i>	h.	0	0
83. <i>Muscicapa parva Bechst.</i>	0	0	au.
84. <i>M. grisola L.</i>	v.	0	au.
85. <i>Phylloscopus rufus Bechst</i>	0	0	ae.
86. <i>P. nitidus Blyth</i>	0	0	au.
87. <i>P. trochilus L.</i>	m. au.	0	0
88. <i>Sylvia curruca L.</i>	v.	0	0
89. <i>S. atricapilla L.</i>	m. n.	0	0
90. <i>Lanius excubitor L.</i>	h.	0	0
91. <i>L. rapax Brhm. (europæus Bogd.)</i>	0	h.	0
92. <i>L. minor Gm.</i>	v. au.	0	m. au.
*93. <i>Enneactonus collurio kobylini, n. subsp.</i>	m. h.	0	m. n.
*94. <i>Sitta europæa caucasica Rchw.</i>	m. h.	0	0
*95. <i>S. syriaca parva, n. subsp.</i>	0	m.	0
*96. <i>Cyanistes caeruleus L.</i>	m. s.	+	n.
97. <i>Parus major L.</i>	m. s.	0	m. n.
*98. <i>Acredula caudata major Radde</i>	m. h.	+	0
99. <i>Regulus cristatus Koch</i>	0	+	0
*100. <i>Certhia familiaris L.</i>	(h.)	+	0
101. <i>Tichodroma muraria L.</i>	(au.)	0	0
102. <i>Anorthura troglodytes L.</i>	m. s.	0	+
103. <i>Anthus trivialis L.</i>	0	0	n.
104. <i>A. cervinus Pall.</i>	v.	0	0
105. <i>A. pratensis L.</i>	v.	0	0
106. <i>Motacilla alba L.</i>	m. s.	0	m. n.
107. <i>M. melanope Pall.</i>	m. h.	0	m. n.
108. <i>Budytes flava L.</i>	v. au.	0	0
109. <i>B. flava borealis Sund.</i>	v. au.	0	0
110. <i>Chelidon urbica L.</i>	m. n.	0	+
111. <i>Hirundo rustica L.</i>	m. n.	0	+
112. <i>Cotile riparia L.</i>	v. au.	0	0
113. <i>Oriolus galbula L.</i>	m. n.	0	0
114. <i>Coccothraustes coccothraustes L.</i>	h.	h.	0
115. <i>Chloris chloris L.</i>	m. s.	0	m. n.
*116. <i>Pyrrhula pyrrhula rossikowi Derj. et Bianchi</i>	h.	+	0

	I.	II.	III.
117. <i>Fringilla cœlebs</i> L.	m. s.	0	(n.)
118. <i>F. montifringilla</i> L.	0	h.	0
119. <i>Passer domesticus</i> L.	m. s.	0	m. n.
*120. <i>P. montanus transcaucasicus</i> , n. subsp. . .	r. v.	h.	m. n.
*121. <i>Carduelis carduelis</i> L.	m. h. v.	0	m. n.
122. <i>Acanthis fringillirostris</i> Bp. et Schl.	0	0	m. n.
123. <i>Emberiza calandra</i> L. (= <i>miliaria</i> L.) . . .	n.	0	m. n.
124. <i>E. citrinella erythrogastris</i> Brhm.	h.	0	m. n.
*125. <i>E. schoeniclus</i> L., var.	h.	0	0
126. <i>E. cia par</i> Hartert.	m. h.	h.	m. n.
127. <i>E. hortulana</i> L.	tr. au.	0	0
128. <i>Sturnus purpurascens</i> Gould	+	0	0
129. <i>Sturnus</i> sp. inc.	(n.)	0	(n.)
*130. <i>Garrulus krynickii</i> Kalenicz	m. s.	h.	m. n.
131. <i>Pica pica</i> L.	0	h.	0
132. <i>P. pica borealis</i> Stejn.	0	h.	0
133. <i>Lycos monedula</i> L.	(h.)	0	0
134. <i>Corvus frugilegus</i> L.	m. h.	0	0
135. <i>C. cornix</i> L.	+	h.	+
136. <i>C. corax</i> L. (? var.)	+	0	0
Number of species	117	24	54

To take an instance in explanation of this list. We must not suppose from "h." that *Emb. cia par* does not nest near Akhazikh; I merely mean that it is represented in the collection from this locality by winter-specimens only.

Additional Notes on some of the Species.

32. *Perdix perdix canescens*, n. subsp.

I have compared two January specimens of this bird (♀ ♀, 15. i. 1905, "N. 278" and "N. 279" †) with my winter specimens of *P. perdix* L. from Southern Livonia and of *P. arenicola* (Buturlin, O. M. 1904, Sept., p. 148) from Turgai (Kirghiz Steppes). The Tiflitz birds can be clearly distinguished from both; they have the chest as closely vermiculated with dark cross-lines as in typical *P. perdix* L. (not so sparsely as in *P. arenicola*), the "horseshoe," flank-bars, and lateral rectrices as rusty chestnut as in typical birds (just a shade darker, but not nearly so dark reddish,

† So numbered on Mr. Kobylin's labels.

as Turgai birds), but the chestnut spots of the feathering of the upper side are almost lacking, just as in *P. arenicola*. Further, *P. canescens* differs from both the above-named forms in the much greyer (not so dirty-brownish) colouring of the upper parts, and especially of the lower back, rump, and upper tail-coverts, and in the light shaft-stripes on the nape and shoulders being whiter and broader. Of course this form is only a geographical subspecies of the Common Partridge. The bird is sedentary in Transcaucasia, nesting up to an altitude of 6000 feet. The wings of my specimens are 154–162 mm. long.

57. *Cypselus apus* L.

The Kutais specimen is not paler than my Ssimbirsk birds, but the light spot on the throat is whiter and larger; I cannot, however, say whether this difference is local or purely individual.

60. *Gecinus viridis saundersi* Taczan.

As regards the female from Kutais, I can see no difference in colour from Livonian and Ssimbirsk birds, but it is smaller, with a slenderer bill (as are all recorded Caucasian specimens).

Dimensions in millim. for several females are:—

	<i>G. viridis.</i>	<i>G. saundersi.</i>
Wing.....	170–173 from Middle Russia.	160 from Kutais.
Tail	98–100 " "	94 "
Culmen	43–44 " "	40·5 "
Depth of bill at the gonyx.....	8–8·2 " "	7·8 "

61. *Dendrocopus major tenuirostris*, n. subsp.

I have compared three specimens* from Transcaucasia (Kutais, "N. 82," ♀, and another without a number, 31 Jan. 1904; Akhazikh, "N. 250," ♂, 11 Dec., 1904) with a score of Ssimbirsk specimens and several others from Esthonia, Livonia, Germany, and Rumania. The colouring of my birds shews no approach to *D. polzami* Bogd.: the under parts are somewhat paler than in German specimens (as was long ago

* Two more specimens have since been received.

stated by Radde, Orn. Cauc. p. 243, Russ. ed.), just like my one Rumanian and my Russian specimens. Transcaucasian birds are smaller—the wing is 131–132 mm. long, while all my Russian and European birds have it 140–150 mm. long, or shorter only in young birds, but never less than 133 mm. (5·23 inches); the bill is somewhat longer and conspicuously slenderer (culm. 23–29 mm. long and depth 8–8·2 mm. at the nostrils) than in Russian and European birds (these last have culm. 21–26 mm. and depth of the bill 8·3–8·6 mm.). Of course this is only a subspecies of *D. major*, named *tenuirostris* from its slender bill.

62. *Dendrocopus leuconotus lilfordi* Dress.

I have no typical *D. lilfordi* to compare with my Kutais specimen. It differs from my Central-Russian and West-Russian specimens of *D. leuconotus* in having the back more barred, the sides of body much more heavily streaked, the under wing-coverts streaked with dark brown, and the dark bars on the tail-feathers broader: so I label it *D. lilfordi*. But the crown is certainly not crimson (as in *D. lilfordi* according to Mr. Dresser), but just as scarlet as in my Russian *D. leuconotus*. Perhaps this is a local race, somewhat different from *D. lilfordi*.

64. *Dendrocoptes medius caucasicus* Bianchi.

Dr. Bianchi based this form ('Annuaire du Mus. Z. de l'Ac. Sc. St. Pétersb.' 1894, vol. ix., in Russ.) on six specimens from the North Caucasus, while all the North-Caucasian specimens of Mr. Lorenz evidently belong to it also (see Lorenz, Beitr. etc. 1887, p. 44, "sehr lebhaftes gelb an der Unterseite"). Hitherto it has not been recorded from Transcaucasia, as modern writers (Menzbier and others) repeat Radde's statement that both typical *D. medius* L., and *D. sancti-johannis* Blauf. are met with there. As regards *D. medius*, I think that this is quite improbable, but Mr. Kobylin *thinks* that he has seen a skin of the true *D. sancti-johannis* there. All the specimens, however, in his own collection (♂ ♀ and juv.) belong to *D. caucasicus*.

This bird can be distinguished from its two conspecifics even without actual comparison :—

- I. On the terminal half of the two external pairs of rectrices white prevails; the third pair with a white (though sometimes dirty) apical spot; the tibial feathers with white prevailing.
- a. Lower breast sulphur- or fulvous-yellow, lightly streaked on the sides; abdomen crimson-red. *medius*.
- b. Lower breast golden-yellow, heavily streaked on sides; abdomen scarlet *caucasicus*.
- II. Terminal parts of the two external pairs of rectrices with black prevailing; third pair entirely black; tibial feathers with black prevailing; abdomen scarlet, lower breast golden-yellow, heavily streaked on the sides *sancti-johannis*.

The wings of my adult *D. caucasicus* are 121–123 mm. (about 4·8 inches) long, the culmen is about 20 mm. (0·8 inch).

75. *Cinclus rufiventris* Hempr. et Ehr.

The erroneous identification of the Caucasian Dipper with *C. cashmeriensis* Gould, committed by Seebohm, has since been repeated by M. Menzbier and other writers on Caucasian ornithology. Only Dr. Bianchi and Mr. Derjugin (K. M. Derjugin, "Materials for an Avifauna of the Chorokh District—South-western Transcaucasia—and of the Neighbourhood of Trebizond," in Ann. Mus. Zool. Ac. Sc. St. Pét. vol. v. 1900, p. 43, in Russ.) have pointed out that the Caucasian Dipper has nothing at all to do with *C. cashmeriensis*, in which the belly and lower breast are uniformly dark brown, while in Caucasian birds this dark brown colour becomes decidedly more rufous near its junction with the white colouring of the upper breast and chest. Evidently the Caucasian birds are much nearer to the European White-chested Dippers, but differ (as Dr. Bianchi points out) from *C. albicollis* Vieill. in the darker brown belly, from *C. cinclus* L. in the absence of black on the middle of it, and from *C. aquaticus* Bechst. in the brighter rufous at the junction of the dark and white parts of the breast.

Thus Caucasian birds must either be identical with *C. rufiventris* Hempr. et Ehr., or belong to a somewhat different local form. Herr Madarász (Ann. Mus. Nat. Hung. i. 1903, p. 559) has named a Dipper from the Caucasus "*C. caucasicus*," but his description is poor and misleading; he had several specimens, adult and young, of the same Caucasian Dipper, of which he named adult (typical) specimens "*C. cashmeriensis*" and described the young as new "*C. caucasicus*," pointing to the features of immature dress as specific differences. Till the Caucasian birds have been carefully compared with Palestine specimens (there are none in the St. Petersburg Museum) I consider it better to leave them under the name *C. rufiventris*.

78. *Pratincola maura* Pall.

In his work on the Birds of European Russia and the Caucasus * M. Menzbier states that *Pratincola maura* Pall. "probably" visits the Caucasus on migration, "but in any case only near the shores of the Caspian Sea." "Probably" is not quite a happy expression, as already (in 1884) Dr. Radde had described this bird clearly (Orn. Cauc. p. 207, Russ. ed., specimens 1 and 2, naming *P. rubicola* L., typ.). But the nesting of *P. maura* here has been proved only by Mr. Kobylin. He states that this bird is a typical inhabitant of the bush-covered slopes of the "Little Caucasus" (Mt. Nakala, 4000 f. h.), and also of the country near Ssuram (2400 f. h.) and v. Gertvisubano. He has sent me several specimens, procured in the latter half of July. Adult males have white unspotted upper tail-coverts, no white at the base of the tail-feathers, and blackish-brown under wing-coverts quite narrowly edged with whitish; the axillaries have blackish-brown bases and

* M. A. Menzbier, 'Birds of Russia,' ii. 1905, pp. 1013 and 1015. I am bound constantly to mention M. Menzbier's compilation, not on account of its intrinsic value (it is confessedly only a popular work, too closely—I should add—following Seebohm's 'Hist. Br. B.'), but because it is the first (and as yet the last) more or less complete account of the distribution of Birds in European Russia and the Caucasus.

inner webs, and white outer webs and ends. The dimensions are as follows (in millim.) :—

	♂.	♂.	♀.	Juv.
Wing	67	63	63	63
Tail	47	45	41	43
Tarsus	21·5	21·5	22·5	21·5
Gape of bill	16	16	16·2	15·5
Culmen	11	13 (inj.)	12	10·5
Bill from nostrils	8·9	8·8	8·8	8
Its height at base	3·7	4·4	4·1	3·8
Its breadth	4·5	5	5	4·5
First primary longer than coverts. .	9	6	9	9
Wing formula—4=3 just > 5 > 6 > 2 nearly = 7 > 8.				

93. *Enneoctonus collurio kobylini*, n. subsp.

My four males* from Kutais and one from Ssuram all differ to some extent from a dozen specimens of Central-Russian *E. collurio* L. The chestnut area of the back is somewhat reduced above and below, giving more room for the grey colouring of the neck and rump. The colour of this chestnut area is also rather duller in Caucasian birds, with a brownish tinge (not so bright rusty-shaded as in Central-Russian birds), and is conspicuously suffused with greyish, such as I have never seen in typical *E. collurio*. The under parts of the body are a trifle paler in the Caucasian form. One old male ("N. 131" of Kobylin's Coll., 25 May, Kutais) has all the back grey, only slightly tinged with chestnut on the mantle. In size I see no difference.

Radde (*l.c.* p. 222, Russ. ed.) points out the same differences between his twenty-five Caucasian specimens on the one hand and several German and Swedish on the other. Th. Lorenz (*op. cit.* p. 40) also writes that in his male specimens from the Northern Caucasus "rothbraun des Rückens siet nicht so weit nach unten erstreckt und ist die Farbe bei den Kaukasiern voller" than in British specimens of *E. collurio* L. So I am bound to conclude that the differences are not individual, but shew geographical variation, and I name this slight variety after Mr. Kobylin — who collected the specimens recorded—*Enneoctonus kobylini*.

* Seven more specimens have since been received.

94. *Sitta europæa caucasica* Rehw.

This form was described by Dr. Reichenow in 1901 (O. M. 1901, p. 53) from the Northern Caucasus, but some half-a-dozen Transcaucasian skins agree closely with it. They are of the type of *S. europæa* L., but the under surface is light rusty, more intense than in *S. cæsia* Wolf, while even the cheeks and the throat are clearly tinged with rufous (they are white in *S. europæa* and *S. cæsia*) and the upper clin alone is whitish. Bill much shorter than in the forms just named, only some 15–16 mm. from the frontal feathers. On the forehead I can see no white.

95. *Sitta syriaca parva*, n. subsp.

Four winter specimens * from Akhazikh, sex not ascertained. Wing 75–80 mm. (75, 77, 79, 80: mean $77\frac{3}{4}$ mm., or 3.05 inches); tail 46–49 mm.; tarsus 20–22 mm.; culmen 16.5–19 mm., its depth at base 4.5–4.8 mm. Upper surface bluish ashy grey, somewhat paler and greyer than in *S. cæsia* and *S. europæa*, but darker than in *S. rupicola* Blanf., as represented on tab. xv. of his work ('East. Pers.'), without white or black on the forehead. From the nostrils through the eye and down the neck to the back runs a black stripe, much longer than in the last-named figure, and much better defined and wider in front of the eye—as long and wide, in fact, as in my *S. europæa* L. from Ssimbirsk and Livonia. Chin, throat, chest, and cheeks with the ear-coverts pure white, gradually becoming dull pale rufous on the lower breast, flanks, and belly. Axillaries pale greyish; under tail-coverts pale grey, indistinctly edged with pale rufous. Primaries brown, edged with whitish at the basal parts of the inner webs; secondaries plumbeous-grey, somewhat tinged with brownish. First primary long and broad: $4\frac{1}{2}$ mm. wide and 23–27 mm. long (measured below from base); second about equal to secondaries. Tail plumbeous grey, quite uniformly coloured from base to tip, only somewhat more bluish on the central rectrices, and a trifle more.

* Two more specimens have since been received.

brownish on the inner webs. In general coloration, and especially in the fact that the rectrices lack all traces of white (as in *S. europæa* and its subspecies) and rufous (as in *S. neumayeri* Michah. and *S. tephronota* Sharpe) spots or bars, Transcaucasian birds are very near to *S. syriaca* Temm. et Ehr., from which they differ in having no traces of rufous edges on the upper wing-coverts, in the grey and not rufous under tail-coverts, and in the much smaller size (see the table, p. 419)*.

What *S. rupicola* Blanf. really is I cannot say, as the figure and description are not sufficient to determine it. The author writes "*S. syriacæ*, Ehr., similis," but (*op. cit.* pp. 223-224) he unites *S. neumayeri* and *S. tephronota* with rufous-spotted, and *S. syriaca* with uniformly coloured tail. Mr. Sarudny ("Birds of East Persia," in Mem. Soc. Im. Russ. Geogr. vol. xxxvi. 1903, p. 345, in Russ.) takes *Sitta rupicola* for a synonym of *S. neumayeri*, and Mr. Hellmayr ('Tierreich,' 18 Lief. 1903, p. 175) for *S. tephronota*; but this last view cannot be admitted, as Blanford expressly states that his bird has the black lore-stripe not well-developed, the throat and breast white, and the under tail-coverts rufous, and figures it accordingly.

In any case my *S. parva* differs from *S. rupicola* Blanf. not only in the somewhat darker upper parts and better-developed lore-stripe, but also in the grey under tail-coverts and in the proportions—the much less slender bill and legs.

For ease of comparison I add a table of dimensions in inches of typical *S. syriaca*, of a good series of the so-called *S. syriaca* from Persia after Sarudny and Blanford, of *S. parva*, and of *S. rupicola* after Blanford. The tail-dimensions I omit, as they vary according to the mode of calculating them:—

* *Sitta canescenti-cinerea*, parva (ala $3\frac{1}{4}$ poll. non attingit), brevisrostris (culmen $\frac{3}{4}$ poll. non attingit); striga nigra transoculari longa; auricularibus, gula, jugulo albis, ventre pallido-rufescente, subcaudalibus cinerascentibus, rectricibus immaculatis griseis; tectricibus alarum rufescente haud marginatis. *Hab.* Transcaucasia.

	<i>syriaca</i> typ.	<i>syriaca</i> of Persia*.	<i>rupicola</i> .	<i>parva</i> , n. sp.
Wing	3·74-3·80	3·40-3·74	2·90-3·15	2·95-3·15
Culmen	0·95-1·03	0·79-0·85	0·65-0·74
Tarsus	1·05-1·16	0·85-0·92	0·78-0·86

It seems to me that *S. parva* can be always distinguished from its congeners without actually comparing the skins; and if it stands in my list as only subspecifically distinct from *S. syriaca* this is merely because I had no more than four specimens of it for comparison*.

Hitherto no *Sitta* with plainly coloured tail-feathers (that is, unspotted with white or rufous on the lateral rectrices) has been recorded from the Caucasus—or, indeed, from within the limits of the Russian Empire.

96. *Cyanistes cæruleus* (L.).

I cannot find any difference between my Transcaucasian specimens and those from Germany: both differ from Ssimbirsk birds in having somewhat less white on the belly, in the darker blue crown, the considerably darker blue wings with narrower whitish transverse band, and the darker greyish-green back not so much suffused with yellowish. My Lenkoran (Talysh) skin is as pale yellowish in its back-coloration as are all Ssimbirsk (Middle Wolga) birds, and has as wide a wing-bar; still it is much paler and duller on the crown and wings.

This Lenkoran bird must be very near to *C. persicus* Blanf. (I have no Persian specimens, and Mr. Blanford's figure—East. Pers. ii. t. xvi. f. 2—with its leaden-grey crown and wings does not accord with his description "dull verditer-blue" and "dull blue," *op. cit.* p. 230), and the form from Eastern Russia (Orenburg-Ssimbirsk) is rightly regarded by Messrs. Sarudny and Loudon as a separate subspecies (*C. cæruleus orientalis* Sar. et Loud. Orn. Mon. 1905, p. 105).

* Is this *S. syriaca obscura* of Sarudny and Loudon (Orn. Mon. 1905, p. 76) from Persia, said to be darker than *S. syriaca* typ., just like *S. neumayeri* Michah.? The description given is evidently merely preliminary.

98. *Acredula caudata major* Radde.

Radde's description and figure (Orn. Cauc. 1884, p. 112, Russ. ed. pl. vi. fig. 1) are not very clear, though, of course, referable to no other form. Mr. Lorenz's description, which is much better, differs in two points from all the specimens that I have received from Mr. Kobylin. Lorenz says (Beitr. Kentn. Orn. F. Kauk. 1887, p. 60): "superciliaries light greyish brown; back grey, paler on the mantle." My birds have light rufous-brown superciliaries and the back becomes slaty blackish near the base of the neck.

100. *Certhia familiaris* L.

As in the case of the *Cyanistes*, Transcaucasian Creepers (I have only one winter bird from the Akhazikh District) seem to be much nearer to the typical form than to the East-European variety; my bird differs from the Sibirsk specimens of *C. scandulaca* Pall. in being duller and less rufous above, and in having the whitish spots (especially on the head) shorter and narrower. From *C. harterti* Hellm. and *C. persica* (Sarud. et Loud. Orn. Mon. 1905, p. 106) it further differs in having no rufous on the tail or underneath.

116. *Pyrrhula pyrrhula rossikowi* Derj. et Bianchi.

Radde states (*op. cit.* 1884, p. 141) that out of twenty-nine specimens of Transcaucasian *Pyrrhula* in his collection only seven winter individuals belong to the south-western form "*P. minor* Schleg." or are intermediate, twenty-two others being of the larger variety. Radde judged exclusively from dimensions, but the dimensions he gives for these presumed "*P. minor*" (wing of ♂♂ 88, 89, 88, and 88 mm., of ♀♀ 88, 85, 90 mm.) fairly exceed the average dimensions of the western form, so that not only 75 per cent. of his birds, but all of them evidently belong to the north-eastern form (or at least are nearer to it).

Lorenz has determined (*op. cit.* 1887, p. 15) his eight North-Caucasian winter skins (from Kislovodsk), with the aid of M. Menzbier, as western "*P. vulgaris* Bechst.," from their being smaller than "*P. coccinea*" of Moskwa and East Siberia (dimensions not given), and from their having a less-developed black cap and reddish tips to the lesser

wing-coverts. In contradiction to his identification, Lorenz points out that Caucasian males "are conspicuous by the exceedingly bright red colouring of their under parts, such as is never seen in *P. coccinea*."

M. Menzbier, who evidently led Mr. Lorenz astray, informs us (*l. c.* 1895, ii. p. 592) that north-eastern "*P. coccinea* De Sel." does not visit the Caucasus even in winter, that "*P. vulgaris* Temm." is widely distributed there, as might be well expected, because this bird belongs to West, Central, and Southern Europe, North-west Africa, and Asia Minor; M. Menzbier adds that he has himself seen from the Caucasus only "*P. vulgaris* Temm.," and tries to ridicule Radde's statements to the contrary.

When Mr. Derjugin published (*Ann. Mus. Zool. Ac. Sc. St. Pét.* vol. v. 1900, p. 43, Russ.) the results of his excursion to the Chorokh basin (South-western Transcaucasia), he named his specimens "*Pyrrhula pyrrhula rossikowi* Bianchi," giving no description, but mentioning that his specimens of this Bullfinch, as all others from the Caucasus and Transcaucasia, had been identified by Dr. Bianchi as belonging to a new subspecies; that Dr. Bianchi had already thought of naming this subspecies *P. pyrrhula rossikowi*, and would shortly publish a full description of it. Mr. Derjugin added that he had satisfied himself that the Caucasian Bullfinch, contrary to Menzbier's assertion, in no way resembled western *P. europæa* Vieill., but was very near to the eastern *P. pyrrhula*, "the chief points of difference being the bright brick-red colouring of the under parts, and the dimensions of the black cap and bill" *.

As neither Bianchi nor anyone else ever published a description of the Caucasian Bullfinch, I will add some notes. I have compared five males and three females from Kutais and Akhalzikh (January) with seven males and four females from Ssimbirsk (March, October, and November) and two males from Livonia (January).

* Thus "*P. p. rossikowi*" of Derjugin and Bianchi cannot be considered as a nomen nudum. The bright red of North-Caucasian birds had already been noticed by Mr. Lorenz (*l. c.*).

I give their dimensions in millim. :—

	Locality.	Sex.	Wing.	Tail.	Tarsus.	Culmen.	Gonys.	Nostrils		
								length from.	height at.	breadth at.
<i>P. rossikowi.</i>	Transcaucasia ..	♂	95	68	18	11·1	7	9·3	10·1	9·5
	" ..	♂	91	65	18	11·2	7·5	9·5	10·6	10·5
	" ..	♂	91	67	18·7					
	" ..	♂	91	65	17·3	9·5	7	8·5	9·5	9·4
	" ..	♂	90	67	17	10	6·8	9·2	10	8·9
	" ..	♀	91							
<i>P. pyrrhula.</i>	" ..	♀	88·5							
	Ssinbirsk	♂	92	67	17·5	9·3	7	8·2	9·6	8·8
	" ..	♂	92·5	68	18	10	7·1	9	10	9
	" ..	♂	91·5	67	18·4	8·5	6·3	7·7	8·6	8·8
	" ..	♂	91	66	18	9·3	6·9	8	8·9	8·9
	" ..	♂	91	69	17	8·9	6·2	7·8	8·7	9
	" ..	♂	89·5	64	18	9·5	6·7	8·5	8·7	8·8
	" ..	♂	90·5	66	18	9·3	6·8	8·6	9·2	8·7
	" ..	♀	89							
	" ..	♀	90							
	" ..	♀	89							
	" ..	♀	88·5							
Livonia	♂	95	65	18	10·5	7·4	9	9·8	9	
"	♂	92	66	17·6	10·2	6·5	8·6	8·9	8·3	

Evidently *P. rossikowi* is not smaller than typical *P. pyrrhula*, and it has a larger bill, somewhat differently shaped, being more swollen in its basal half and more suddenly compressed near the point; this difference is not striking, yet evident in a series. In both forms the first primary is usually nearly equal to the fifth or only a little longer. The black cap in *P. rossikowi* is—if anything—somewhat larger than in typical *P. pyrrhula*, *i. e.* somewhat more prolonged on the nape and hind-neck* (so far as can be ascertained from stuffed skins), and seems to be even less rounded behind. In males the red colouring of the under parts is somewhat brighter* and of a brick-red shade in *P. rossikowi*: it is a little paler and duller and more roseate or crimson-coloured in *P. pyrrhula*. The white rump-band in *P. rossikowi* is somewhat narrower, 22–26 mm. wide (23–27 mm. in

* In *P. europæa* (= *minor* of Radde), on the contrary, the cap is shorter and the red of the under parts duller than in *P. pyrrhula*.

P. pyrrhula). The under parts of the female in *P. rossikowi* are also somewhat darker and more greyish or earthy brown, and in typical *P. pyrrhula* lighter and more sandy, or burned-wood brown. All these differences are clearly only sub-specific.

This bird nests in the forests of the Akhazikh District from 4000 feet upwards.

120. *Passer montanus transcaucasicus*, n. subsp.

All my Transcaucasian specimens differ from Middle-Russian *Passer montanus* in having the belly conspicuously whiter. They are also, as Dr. Radde has already pointed out (*op. cit.* p. 147), somewhat smaller, but the difference is trifling. My specimens measure in millim. (all adult winter specimens):—

Locality.	Wing.	Tail.	Culmen.	
Akhazikh.....	66·5	50	10·3	} <i>P. m. transcaucasicus</i> .
„	69·5	51·5	11	
„	71	52	9	
Ssimbirsk.....	69	53	9·3	} <i>P. montanus typicus</i> .
„	71	52	10	
„	71	52·5	11	

The belly of *P. m. transcaucasicus* is so much whiter that every specimen can be easily determined by comparison. I can see no other differences.

121. *Carduelis carduelis* L.

I have examined five specimens from Transcaucasia (Tiflitz, January; Kutais, February, March, May; Ssuram, June), not sexed, five males and four females from Ssimbirsk, and a score of specimens (in the Museum of C. Harald Loudon) from N. Turkestan, the Transcaspien Region, Orenburg, Pskow, Livonia, Rumania, Germany, England, and Tunis. Transcaucasian birds must belong to the form *C. elegans brevirostris* of Sarudny (Bull. Soc. Imp. Nat. Mosc. 1889, p. 133), who described the bird from Baku (western shore of the Caspian Sea) as being smaller (wing 70–78 mm.) than typical *C. carduelis*, with light brownish grey back, earthy grey spot on the sides of the breast, strongly brownish-stained cheeks, and a much reduced white nape-spot.

All that this talented explorer says is quite correct, if we

take as typical *C. carduelis* the Goldfinch of Eastern Russia, where Mr. Sarudny did splendid work. And even then the colour-differences of the back, checks, and under side, being far from strong, are quite trifling*. But I must confess that I cannot separate my Caucasian Goldfinches from specimens of Western and Central Europe: their back is perhaps a shade duller and the yellow mirror paler, but the difference is so slight that a larger series must be examined before definite conclusions can be reached. The dimensions of the Caucasian birds are: wing 76–82 mm., culm. 11·3–11·8 mm.

The Goldfinches from Central and Eastern Russia (from Ssuram to the Ural) deserve separation. They differ from typical examples in the purer white of the checks, the greater amount of white on the nape and rump, the larger yellow wing-mirror, but chiefly in their larger size and stronger bill. I give some dimensions (in millim.) of my Ssimbirsk specimens (spring and autumn):—

<i>C. volgensis.</i>	{	Sex	♂	♂	♂	♂	♂	♀	♀	♀	♀
		Wing	85·5	84	83	83	82·5	82	81	80	78·3
		Culmen	13·3	13·8	13·7	13·7	13·5	12·5	12	12	12·5

This large East-Russian form, which I propose to name *C. carduelis volgensis*, cannot be confounded with the Kirghiz Goldfinch: *C. major* Tacz. is not only larger still (wing ordinarily not under 85 mm. in the male), but its pure white rump and lower back, sharply contrasting with the upper back, is so characteristic that anyone can identify it without comparison, if once acquainted with the bird.

125. *Emberiza scheniclus* L.

Having no material for comparison, I cannot decide to what form of *E. scheniclus* my Transcaucasian and Ssimbirsk specimens (they are very much alike) are referable. Their bill is 8·5–9 mm. long, measured from the frontal feathering, and 5·3–5·5 mm. high at the nostrils; in form it is very like the figure of *E. s. canneti* in Mr. Hartert's most useful work (Vög. paläark. F. p. 197, fig. 39).

* To me it seems, for instance, that the dark spots on the sides of the breast are even of a somewhat more intense brown in Caucasian than in East-Russian birds.

130. *Garrulus krynickii* Kalenicz.

All the Jays collected by Mr. Kobylin near Kutais, Ssuram, and Akhalzikh belong to this form, which is very common in the Caucasus (its typical locality) and in Transcaucasia (except the south-easternmost and south-westernmost parts, both somewhat peculiar in their faunas). *G. krynickii* has also been recorded from the Crimea, the Balkan Peninsula, and the western shores of Asia Minor*. Are these Balkan and Smyrna birds really identical with those from Caucasia? I cannot say, having seen no specimens; the former are described (in Dresser's magnificent work, iv. p. 485; id. 'Manual,' p. 414) as having the nape and back grey. In all my Transcaucasian specimens the back is (though faintly) suffused with vinous, and the nape and hind-neck are darker *dull vinous*, slightly tinged with grey.

In the south-eastern part of Transcaucasia, the Talysh lowlands, *G. caspius* is met with. In the south-western part, the Chorokh basin and the neighbouring country, a Jay abounds that was at once recognised as new to the Russian avifauna by Mr. Derjugin, who visited that country in the summer of 1898 (Ann. Mus. Zool. Ac. Sc. St. P. v. 1900, p. 43 †). Mr. Derjugin identified this Jay as "*G. melanocephalus*, var. *anatoliæ* Seeb." (and the Caucasian Jay as *G. atricapillus* Geoffr.). In this I consider him to be wrong. *G. anatoliæ* of Seebohm is plainly only a synonym of *G. krynickii*. At any rate, Seebohm neglected the old description of the Caucasian Jay by Prof. Kaleniczenko, while, wrongly confounding ‡ Turkish and Caucasian birds with

* Mr. Danford ('Ibis,' 1877, p. 263) mentions it from the south-eastern part of Asia Minor (Taurus), but were his birds compared with *G. atricapillus* and typical *G. krynickii*?

† See also a shorter account in 1899, Trav. Soc. Imp. Nat. St. Pet., as given below.

‡ Seebohm, Hist. Br. B. i. p. 570: "In Eastern Turkey, Asia Minor, the Caucasus, Palestine, and South Persia a Black-headed Jay is found, *G. atricapillus*, which principally differs from our bird in having the crown and nape black and the feathers of the forehead and throat nearly white. In Asia Minor many examples (*G. anatoliæ*) have the darker forehead and throat of our bird, but retain the black head." Here "our bird" means the British form of *G. glandarius*, and "the black head" refers to *G. atricapillus*.

white-fronted and white-throated *G. atricapillus* of Palestine, and seeing differently coloured (not white-fronted) specimens from Asia Minor, he gave them a new name "*G. anatoliae*." As "Anatolia" is known to be inhabited by *G. krynickii*, and as Seebohm expressly states that his *G. anatoliae* differs from the Palestine Jay in having the forehead and throat not white, but of the colouring of the Common Jay, it must follow that *G. anatoliae* is a synonym of *G. krynickii**.

As a matter of fact, Mr. Derjugin collected in Northern Armenia † (Batum and Artvin districts: Borchkha, Artvin, Ardanuch) a good series of Jays, all of them differing at a glance from other allied forms in having the forehead entirely black, only some of the nasal feathers being lighter. Further, these Armenian specimens differ from the true *G. krynickii* in the sides of the head being much more richly coloured. This Armenian Jay needing a new name, I call it

Garrulus nigrifrons, n. sp. Armenian Jay.

(*Garrulus melanocephalus*, var. *anatoliae* apud Derjugin, 1899, Trav. Soc. Imp. Nat. St. Pétersb. vol. xxx. livr. 2, p. 64, *nec* Seebohm.)

Garrulus mystaceus, speculo cæruleo unico, fronte pileoque cum crista occipitali totis nigris, capitis lateribus intense vinaceis, in Transcaucasia occidentali australi ad Tschoroch fl. frequens.

The differences between the Palearctic Jays with prevailing black on the crest may be tabulated as follows:—

I. Occipital crest uniformly black.

a. Cheeks and ears white.

a'. Forehead black-spotted, hind-neck bright rusty-red *cervicalis* Bp. Tunis.

b'. Forehead white, hind-neck pale, vinous-buff.

atricapillus Geoffr. Syria.

* Of course, if birds from European Turkey and Asia Minor actually prove to differ constantly from Caucasian specimens in the decidedly greyer hind-neck and mantle, then Seebohm's name must hold good for them (but not for the Chorokh birds in any case).

† Armenia in zoological affinities; historically the Chorokh country is a part of Grusia.

b. Cheeks and ears vinous.

c'. Forehead whitish vinous, sides of head pale
vinous *krynickii* Kalenicz. Caucasus.

d'. Forehead quite black, sides of head rich vinous.
nigrifrons, n. sp. Armenia.

II. Occipital crest-feathers black, narrowly margined
with rufous.

c. Sides of head rufous, general coloration intense,
vinaceous..... *caspius* Seebohm. Talysh.

d. Sides of head white, general colouring pale, greyish.
whitakeri Hart. Morocco.

Other allied forms (such as *G. minor* Verr., *G. hyrcanus* Blanf., &c.) cannot possibly be described as having the black colour prevailing on the crest.

XXVII.—*Field-Notes on the Birds of Chinkiang, Lower Yangtse Basin.*—Part I. By J. D. D. LA TOUCHE, C.M.Z.S., M.B.O.U.

IN 'The Ibis' for 1891 (pp. 316-359 & pp. 381-510) Mr. F. W. Styan gave a very complete and accurate account of the Birds of the Lower Yangtse Basin, which he further augmented by supplementary papers in 1894 and 1899. The following pages, therefore, add but few species to the general list of the birds of that district, and consist mainly of local notes compiled during a five years' residence at Chinkiang. Local notes and lists of this kind are, I consider, necessary if it is desired to obtain an accurate knowledge of the distribution of birds in China, where the climate and physical features of the country vary to a far greater extent than is generally supposed.

Chinkiang, one of the most important prefecture-cities on the Lower Yangtse, is situated on the south bank of the river at its most northern bend, about 150 miles from the sea (lat. 32° 13' N. by long 119° 25' E.). The country on the north bank is a vast cultivated plain, much intersected by tidal creeks and canals. A few detached hills rise about twenty miles to the west, and there is another low range